# UNITED STATES PATENT AND TRADEMARK OFFICE
# CERTIFICATE OF CORRECTION

PATENT NO.     : 7,299,454 B2
APPLICATION NO. : 10/784600
DATED          : November 20, 2007
INVENTOR(S)    : Pugh et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page, On page 3, Item (56), under "Other Publications", delete "Lnaguage" and insert -- Language --, therefor.

In column 5, line 5, delete "(LanguageLxt," and insert -- "(LanguageExt, --, therefor.

In column 7, line 20, delete "scenanos." and insert -- scenarios. --, therefor.

In column 8, line 21, after "SUPPORT" insert -- . --.

In column 7-8, line 50, delete "runninq" and insert -- running --, therefor.

In column 7-8, line 60, delete "lanuguage" and insert -- language --, therefor.

In column 9-10, line 29, delete "yeilds." and insert -- yields. --, therefor.

In column 11-12, line 54, delete "languagy" and insert -- language --, therefor.

In column 15-16, line 78, delete "lanuguage" and insert -- language --, therefor.

In column 17-18, line 23, delete "passingit" and insert -- passing it --, therefor.

In column 17-18, line 24, delete "IScritp" and insert -- IScript --, therefor.

In column 17-18, line 35, delete "lang_Ext" and insert -- langExt --, therefor.

In column 17-18, line 72, delete "SUPPOPT" and insert -- SUPPORT --, therefor.

In column 19-20, line 76, delete "languagy" and insert -- language --, therefor.

In column 23-24, line 27, after "Variable" insert -- . --.
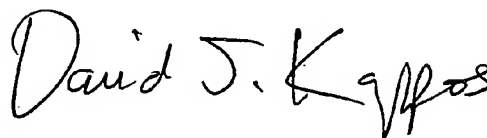
In column 23-24, line 47, above "

| Message | Sender | Meaning | Parameters |
| --- | --- | --- | --- |

"

insert -- Network Messages
As has already been discussed, some embodiments use facilities in the runtime messaging
environment to perform debugging operations on network messages. This capability is demonstrated
here by example shown in the table below developed using the JAVA™ language. In another
embodiment, method calls may be made via the native debugging infrastructure JDI. Methods are
called on the ScriptController via JDI to do continues and other such tasks. Breakpoints are executed
by hitting actual JAVA™ breakpoint and are then translated in the proxy to script breakpoint. Thus,
breakpoints reduce to java breakpoints. JDI sends a message to the proxy in the underlying JDI
protocol. For example, a packet may be sent from the server to the proxy that includes meta-data for a
scripting language. The meta-data is used to determine whether to treat the language as a scripting
language or to treat the language as a native language. It will be understood that the invention is
equally applicable to any programming language. This example is presented for illustrative purposes
only and is not meant to limit the scope, functionality or spirit of any particular embodiment of the
invention. --.

Signed and Sealed this

Sixteenth Day of March, 2010

David J. Kappos
*Director of the United States Patent and Trademark Office*